

## IMG Avalanche Training

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Thanks for your interest in IMG's Avalanche Training Programs.

We offer the highest quality avalanche programs available in the Northwest for the serious backcountry skier and climber. Our courses meet or exceed the education guidelines of the American Avalanche Association.

The IMG avalanche instructors are well known in the professional avalanche community. They are among the most experienced professionals in avalanche education, forecasting, control, guiding, and research. Most of our instructors have between 20-25 years of daily operational avalanche forecasting experience. In fact, most of the local avalanche instructors have attended our courses.

### International Mountain Guides Avalanche Instructors and Staff

#### Paul Baugher

Patrol Director at Crystal Mountain Resort. Paul is an owner/ guide with International Mountain Guides Guide with past guide with North Cascade Heli-skiing. He is a consultant to U.S. snow safety operations. Paul is Chairman and an instructor for the U.S. National Avalanche School ([avalancheschool.org](http://avalancheschool.org)). He has been directly involved in the rescue or as a principal investigator in 23 avalanche accidents in the U.S. Paul is also a former Vice President of the American Avalanche Association.

#### Mark Moore

Director and forecaster with the Northwest Avalanche Center (NWAC). Instructor for the National Avalanche School, American Avalanche Institute, and Alaska Avalanche school. Avalanche research scientist. Mark is also a past chairman of the International Snow Science Workshop (ISSW).

#### Chet Mowbray

Professional Snow Safety Director at Crystal Mountain, forecaster and avalanche control specialist. Chet is also a field instructor with National Avalanche School.

#### Knox Williams

Founded and ran the Colorado Avalanche Forecast Center, the first in the US. Knox was recently a forecaster with Northwest Avalanche Center. He is the former president of the American Avalanche Association.

#### Eric Simonson

Partner in International Mountain Guides. Leader of over 70 international mountaineering expeditions, including the Mallory Research Expedition. Eric has lots of high altitude avalanche evaluation experience.

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*“I could go on and on, but the bottom line is that your organization is first-rate in every respect. Thanks for everything... I hope to make use of your services again...”*

—Tom G.

For more comments from IMG climbers, please see our website at: [www.mountainguides.com/comments.shtml](http://www.mountainguides.com/comments.shtml)

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## Level I Avalanche Training -- Hazard Evaluation

Crystal Mountain, WA • January 14-16, 2012 • \$395 (meets requirements for certificate)

This intensive course focuses on the principles of stability evaluation, route selection, safe travel and rescue. The first 2 days includes a combination of classroom and fieldwork. The final day includes application of skills on backcountry tour.

### Course description:

This is a basic course covering the fundamentals of avalanche hazard evaluation. The first session will introduce you to the physical processes involved in the formation of avalanches. During the first two days we will be in the field practicing terrain recognition, route selection, safe travel techniques, and rescue problems. The last day is a backcountry tour where we put the skills together.

Field oriented people aspire to the skill of being able to stick a hand into the snow and make an informed assessment of the snowpack stability. The need to make timely decisions is important but it must be understood that there are no shortcuts to acquiring these “quick analysis skills”.

A basic understanding of the physical properties of weather, snow, terrain, and their interaction, is a necessary foundation for informed avalanche forecasting. The knowledge of the natural processes involved enhances your field experience dramatically. Relating field input to the physical processes involved is a central theme in all of our courses.

### Course Requirements:

#### 1. An avalanche transceiver, probe, and shovel.

Bring your own or you may be able to rent one from the local climbing/ski shops. IMG has a few transceivers for rent. If you wish to rent or buy one from us please call us before the class. A field observation book, Lens (10-20x), crystal card, and snow saw are suggested. Be prepared to stand in snow pits in bad weather.

**2. Intermediate or advanced skiing ability** on alpine, ski mountaineering, snowboard, or telemark gear is the norm. If you are using snowshoes, or are concerned about your skiing skills, we will have a group that goes into gentler terrain. Our primary access will be by chairlift and short hiking with skis. Please include skins and appropriate equipment for a backcountry tour.

#### 3. Download curriculum reading from [mountainguides.com/avalanche.shtml](http://mountainguides.com/avalanche.shtml):

Safety During Rescue, Mountain Snowpacks

### Location and Lodging:

The course meets at **Crystal Mt. Firehall** (below parking lot B) at 8 AM. You will receive group assignments and conclude any unresolved business at that time (equipment rental and purchase, etc.). You are responsible for your food and lodging. Please check [www.CrystalHotels.com](http://www.CrystalHotels.com) or [www.skicrystal.com](http://www.skicrystal.com) You can also call 1-888-SKI-6400 for lodging information at Crystal. The Alpine Inn currently offers a 20% discount for IMG course participants.

### Contact:

If you have any additional questions please contact [paul@mountainguides.com](mailto:paul@mountainguides.com)

## Level I Avalanche Training -- Hazard Evaluation Itinerary

### Saturday January 14: Crystal Mt. Firehall

8:00 Registration, equipment, and personal introductions

8:30 Avalanches Characteristics and Human Factors

9:00 Terrain Analysis

Break

10:00 Route Selection, Safe Travel, Hazard Evaluation

11:00 Mountain Snowpack Introduction

11:30 Lunch

12:30 **Field Crystal Mt. Backcountry**

Transceivers  
Rescue Drill  
Terrain Analysis  
Route finding and Safe travel

4:30 End of Field Session

#### Course Cost Includes:

- All instruction and permits
- Ski lift tickets (on days we use lifts)
- Shared use of snow study equipment

#### Cost Does Not Include:

- Transportation costs
- Personal equipment including skis or snowshoes
- Avalanche equipment including, beacon, probe, or shovel
- Food and lodging

### Sunday January 15: Crystal Mt. Firehall

8:00 Mountain Weather

9:00 Mountain Snowpack

Break

10:30 Stress, Failure, Fracture, and Motion

11:00 Decision Making/ Hazard Evaluation Workshop

11:45 Lunch

12:30 **Field Crystal Mt. Backcountry**

Trip Planning and Group Management  
Snow Profiles  
Snowpack Testing/ Rustchblocks

### Monday January 16: Crystal Mt. Backcountry

9:00 Meet at Ski Patrol room for backcountry tour  
Decision Making /Route finding and Safe travel Exercise  
SnowpackTesting

4:30 End backcountry tour

## Level II Avalanche Training – Forecasting Workshop

Crystal Mountain, WA • January 27-30, 2012 • \$450 (meets requirements for certificate)

This is the premier advanced course in the Northwest. The course features instructors that are professional avalanche forecasters, with over 90 years of combined experience.

The format of field and classroom allows the participants to focus on forecasting problems specific to the Northwest. With more than 50% of the instruction in the field, an emphasis is placed on skill development and practice. Classroom workshops will contain some problem solving. This course provides the greatest benefit to participants that have completed level I training and are familiar with avalanche fundamentals.

### Course description:

The first 2 days of this course use a lecture/ field format. This will allow participants that have had level II training in the past 3 years to update their skills. A new certificate will be issued. The focus is on learning and practicing field forecasting skills. These forecasting skills will be applied to selected avalanche problems specific to the Northwest. The last 2 days are primarily backcountry tour days to practice, hone and apply the forecasting skills.

The need to make timely decisions is important but it must be understood that there are no shortcuts to acquiring these “quick analysis skills”. A comprehensive understanding of the physical properties of weather, snow, terrain, and their interaction, is a necessary foundation for informed avalanche forecasting. The knowledge of the natural processes involved enhances your field experience dramatically. Relating field input to the physical processes involved is a central theme in all of our courses.

### Course Requirements:

#### 1. An avalanche transceiver, probe, and shovel.

Bring your own or you may be able to rent one from the local climbing/ski shops. IMG has a few transceivers for rent. If you wish to rent or buy one from us please call us before the class. A field observation book, Lens (10-20x), crystal card, and snow saw are suggested. Be prepared to stand in snow pits in bad weather.

**2. Intermediate or advanced skiing ability** on alpine, ski mountaineering, snowboard, or telemark gear is the norm. If you are using snowshoes, or are concerned about your skiing skills, we will have a group that goes into gentler terrain. Our access will be by chairlift and short hiking with skis. Please include skins and appropriate equipment for a backcountry tour.

**3. Download curriculum reading from [www.mountainguides.com/avalanche.shtml](http://www.mountainguides.com/avalanche.shtml):**  
Avalanche Forecasting, Slabs and Weak Layers, Recycled Powder and Faceting, Release and Motion

### Location and Lodging:

The course meets at **Crystal Mt. Firehall** (below parking lot B) at 8 AM. You will receive group assignments and conclude any unresolved business at that time (equipment rental and purchase, etc.). You are responsible for your food and lodging. Please check [www.CrystalHotels.com](http://www.CrystalHotels.com) or [www.skicrystal.com](http://www.skicrystal.com) You can also call 1-888-SKI-6400 for lodging information at Crystal. The Alpine Inn currently offers a 20% discount for IMG course participants.

**Contact:** If you have any additional questions please contact [paul@mountainguides.com](mailto:paul@mountainguides.com)

## Level II Avalanche Training – Forecasting Workshop Itinerary

### Friday January 27: Crystal Mt. Fire Hall

8:00 Registration/ Field assignments

Problems associated with faceting in a Maritime snowpack

Break

Snow Profile Methodology and Field Skills

Accident Investigation/ Case Study

### Field Session Avalanche Basin

Skill building emphasis on:

Snow profiles

Faceted snow recognition

### Saturday January 28: Crystal Mt. Fire Hall

8:00 Weather Forecasting in a Maritime Climate

Plotting Snow Profiles

Operational Forecasting Workshop

### Field Session Silver Basin

Skill building emphasis on:

Snow profiles

Meteorological reconstruction via snow profiles

### Sunday January 29 and Monday January 30: Crystal Mt. Backcountry

9:00 Meet at Ski Patrol room for backcountry tour

Safe travel exercise

Generating a forecast

Route selection and snowpack testing

4:30 End backcountry tour

#### Course Cost Includes:

- All instruction and permits
- Ski lift tickets (on days we use lifts)
- Shared use of snow study equipment

#### Cost Does Not Include:

- Transportation costs
- Personal equipment including skis or snowshoes
- Avalanche equipment including, beacon, probe, or shovel
- Food and lodging

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*“Every company in America, in any industry, should go to school at IMG for their tremendous service, relentless attention to detail and maximum level of great mojo (more companies desperately need IMG mojo)...”*

—Jeff M.

For more comments from IMG climbers, please see our website at: [www.mountainguides.com/comments.shtml](http://www.mountainguides.com/comments.shtml)

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